

ABSTRACT OF THE DISCLOSURE

A chain guide and mounting system are disclosed, which lead the chain guide to be arch-loaded and to have greater strength than traditional chain guides under normal operating conditions. The mounting bolt hole locations are designed for a given chain guide bolt slot configuration, or *vice versa*, or the bolt shafts are enlarged. The relationship between the bolt holes and the bolt slots is such that when the chain guide is mounted, loaded, and subjected to normal operating temperatures, the bolts are flush with the sides of the bolt slots. Thus, some of the forces from the operating chain are converted into compressive stresses, thereby reducing the maximum tensile stress, reducing maximum deflection, and increasing the safety factor of the chain guide.